ACUTE ATYPICAL COURSE OF POLYRADICULONEURITIS

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Clinical borderlines of primary polyradiculoneurites (PRN) are not clearly outlined yet (9). The polytopics of the lesion within the peripheral nervous system and in the segmental apparatus of the spinal cord as well argues for multiformity of variants and clinical peculiarities of PRN. Becoming more frequent of some atypical forms nowadays and seldom fatal outcome in cases with PRN presents the reasons to analyze the data from our clinical material.

Material and method

Our study reported the observations on 30 patients in the Clinic of Neurology at the Higher Institute of Medicine — Varna during the period 1982—1983. Their age varied between 5 and 64 years. Males were more frequently affected by primary PRN than females (ratio 2.5:1). Most patients were physical workers (only 7 were employees or pupils). Overcooling or physical overwork was anamnestically reported to have provoked the illness in 22 patients. The neurologic symptomatics was preceded by upper respiratory tract catarrhs with the rest patients.

Results and discussion

PRN were sporadically registered in different months of the year during this period. It should be noted that they became more frequent in March—April and September—October both. Patients' group of 6 clinical observations from September—October 1983 was of real practical interest and thus our special attention was devoted to.

The onset of the disease was acute in 28 cases and the clinical picture was formed for 3—5 days only while there was a chronic progressive course of the illness only in 2 cases. Initial signs of febrility accompanied by general malaise and headache were found in 8 cases.

The onset of neurological disorders consisted in progressive damage of the peripheral nervous system in the form of motor and sensory disturbances with well-expressed extensivity of the single phenomena in 25 clinical observations. Paretic manifestations started in the lower limbs and involved gradually (although slighlier expressed) the arms in 21 cases. A quadriparetic syndrome was formed that affected simultaneously all the extremities in the rest cases. The slightly-expressed asymmetry of pareses in 7 patients did not allow us to challenge the regular bilaterality of the pathological process which presented one of the steady criteria for diagnosticating.

Craniocerebral nerves (CCN) were affected in 16 patients which was relatively high percentage. The 7th CCN was most frequently involved followed in a considerable distance by the 3rd, 5th or 9th CCN. The lesion of the spinal cord was

demonstrated by disturbances of conduction type and bladder upsets in some of the clinical observations. Concerning the cerebrospinal fluid it should be mentioned that there was protein-cellular dissociation with protein levels between 55 and 100 mg % and rather more seldom — up to 200—300 mg % in a total of 40 per cent of the cases. Moderate cellular pleocytosis up to 50/3 lymphocytes with transitory character was established in 5 cases only.

Certain authors discussed the hypothesis about primary PRN existance due to various viruses. A special attention was paid to enteroviruses and some still unidentified neurotropic viruses (1—8). This possibility was confirmed by our series of 6 interesting clinical observations with one and the same clinical picture. Two of them had fatal outcome within 2—4 days and the rest ones remained with severe residual phenomena.

Patient B. S. A., age 19, c. r. No 22294/1983. On September 8, 1983 in the evening he felt suddenly pains in the waist and left seat regions as well as on the postero-lateral surface of the left lower limb. He was investigated by the district neurologist and treated concerning an ischialgic syndrome. 5 days later he was admitted to the neurological clinic because of intensifying pains in the left leg. During the next hours he felt girding pains mainly in the epigastrium and motor weakness of both legs with pains first in the lower and then in the upper limbs accompanied by respiratory disorders. He became psychomotorially excited and inadequate with hallucinations from time to time. His temperature was 37 °C at hospitalizing. There was tachyarrhythmia but blood pressure was normal (RR 110/70).

Neurologically, there was a syndrome of peripheral lower paresis that progressed for hours to quadriparesis with areflexia, hypalgesia and hyperpathia of peripherical-nervous type. Paraclinical examinations were normal. Immediately after hospitalizing a combined treatment with corticosteroids, cardiotonics, and analeptics was administered. However, despite the reanimation efforts 20 hours later the patient died with manifestations of rapidly advancing respiration palsy. The pathologoanatomical picture revealed an acute polioencephalomyelitis, brain oedema with tonsillar clivage, bilateral focal bronchopneumonia and cyanosis of the internal organs.

This clinically developed unilateral radicular symptomatics with 5 day duration, the visceral manifestations added and rapidly appeared bilateral alterations present a differential-diagnostic difficulty and determine the atypical course of the disease.

Patient L. P. A., age 18, c. r. No 32137/1983. On September 21, 1983 after physical loading he felt weakness of the left and later on of the right arm. He was examined by a physician from the Service for Emergency Medical Aid and because of the lack of any pathological findings the diagnosis «Neurosis-Hy» was determined. On the next day he could not get up after waking up because of weakness of all limbs. However, in the bed he could move actively rather well. In the next hours he reported waist pains and swallowing disorders. At hospitalizing in the neurological clinic certain nasopharyngeal catarrh signs could be established. Neurological status: syndrome of peripheral quadriparesis stronglier expressed in the lower limbs with areflexia and hypesthesia of distal type combined with elements of hyperpathia. Babinski's group phenomena were bilaterally positive. Taking in consideration the rapidly developed respiratory disturbances we admitted the patient into the station of intensive care and put him on apparatus respiration according to definite parameters. A combined treatment was started

including anticholinesterase means, antibiotics, vitamins, corticosteroids, neuro tropic drugs and infusions. After managing the trophical disorders a rehabilitation program was started in December. Motor deficit was partially improved and the patient was admitted to balneological treatment having flexor leg contractures. Muscular testing showed values between 3 and 4 while abductory muscularity was estimated with zero points.

Patient S. A. S., age 18, c. r. No 23859/1983. On September 28, 1983 she complained of muscular pains of the whole body, headache, vomiting, high temperature (up to 39 °C). A treatment oriented towards an influenza-like disease was started. 2 days later she was hospitalized as an emergency case in the neurological clinic in a generally damaged status, febrility and swallowing disorders. Anamnestically, she had had a childbirth with normal course and no complaints till the period described above. Neurologically, there was a syndrome of quadrihypotonia combined with hypo- till areflexia, severe quadriparesis rapidly advancing into quadriplegia. There occurred pains in both arms girding the chest accompanied with fast progressing respiratory failure. The patient was transmitted into the station for intensive care where the treatment continued by adding a long-lasting parenteral nutrition. There were variations of the parameters, periods of improving and worsening of her status. Almost 6 months later the patient was discharged from hospital in a good general condition having a slightly expressed motor deficit of all extremities only.

Concerning the rest three cases it could be noted that they had the analogous course of the disease. One 6-year old child showed a considerable improvement and minimal residual alterations while one 65-year old man despite the use of controlled respiration in the station of intensive care got progressively worse and worse and he had fatal outcome. The pathologo-anatomic picture was similar to the first one described above and was additionally complicated by cardiovascular insufficiency.

The dissemination of the inflammatory process primarily affecting the peripheral nervous system and the spinal cord presents an unifying link between the cases observed. The prevalence of paretic over the sensory disturbances, the tendency towards progression and enlargement as well as the cerebrospinal fluid findings bring these cases near to the classical PRN description. The well-expressed general-brain manifestations, paroxysmal flushings, tachycardia and other visceral phenomena can be considered signs of brain stem involvement in 2 of our patients. Z. S. Manelis (1970) suggests to unite into a group of encephalomyelopolyradiculoneuritis both the acute primary encephalomyelitis and PRN on the basis of electrophysiological and pathomorphological investigations. By this way rules of classical neurology complied with transformation peculiarities of clinical forms of neuroinfections present a pillar in building of the diagnosis and determining the appropriate therapy with atypical cases of polyradiculoneuritis.

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ОСТРОЕ АТИПИЧУСКОЕ ПРОТЕКАНИЕ ПОЛИРАДИКУЛОНЕВРИТОВ

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РЕЗЮМЕ

Авторами анализируются клинические наблюдения 30 больных полирадикулоневритом. Устанавливается, что постоянным и наиболее существенным признаком клинической картины являются двигательные нарушения периферического типа. Характерным в 6 случаях является восходящий паралич с затригиванием бульбарных функций, что привело к летальному исходу двух больных. У всех больных отмечается затяжное протекание паретических явлений.

В работе обращается внимание на некоторые дифференциально-диагностические критерии, имеющие значение для раннего диагноза и правильного лечения при атипических случаях полирадикулоневрита.